

Please replace the paragraph beginning at page 13, line 5 with the following:

AZ In one embodiment, system 200 is adapted to test the CY8C25xxx/26xxx series of microcontrollers made by Cypress MicroSystems, Inc., 22027 17th Avenue SE, Suite 201, Bothell, WA 98021. In this embodiment FPGA 220 emulates the core processor functionality (microprocessor functions, Arithmetic Logic Unit functions and RAM and ROM memory functions) of the Cypress MicroSystems CY8C25xxx/26xxx series microcontrollers. Detailed information regarding this commercial product is available from Cypress MicroSystems, Inc., in the form of version 1.11 of "PSOC DESIGNER: Integrated Development Environment User Guide", which is hereby incorporated by reference in its entirety as background material. While the present invention is described in terms of an ICE system for the above exemplary microcontroller device, the invention is equally applicable to other complex circuitry including microprocessors and other circuitry that is suitable for analysis and debugging using in-circuit emulation. Moreover, the invention is not limited to the exact implementation details of the exemplary embodiment used herein for illustrative purposes.

Please replace the paragraph beginning at page 14, line 19 with the following:

AZ In the present embodiment, the design of microcontroller 232 is implemented using the VERILOG® language (or other suitable language). Thus, the full functional design description of the microcontroller is available in a software format. In one embodiment base station 218 is based upon the commercially available SPARTAN® series of FPGAs from Xilinx, Inc., 2100 Logic Drive, San Jose, CA 95124. The VERILOG® description can be used as the input to the FPGA design and synthesis tools available from the FPGA manufacturer to realize the virtual microcontroller 220 (generally after timing adjustments and other debugging). Thus, design and realization of the FPGA implementation of an emulator for the microcontroller (virtual microcontroller) or other device can